

EXHIBIT F



Keker, Van Nest & Peters LLP
633 Battery Street
San Francisco, CA 94111-1809
415 391 5400
keker.com

Deeva Shah
(757) 553-8301
dshah@keker.com

January 20, 2021

VIA ELECTRONIC MAIL

Michael J. Ercolini
Prince Lobel Tye LLP
One International Place
Suite 3700
Boston, MA 02110
mercolini@princelobel.com

Re: *Singular Computing LLC v. Google LLC*, 1:19-cv-12551-FDS (D. Mass.)

Dear Michael:

I write in response to Singular's January 11, 2021 letter regarding Singular's ESI custodians, as well as to provide Google's proposed search terms for Singular's ESI collection.

Singular ESI Custodians

Your letter stated that out of the eleven proposed custodians, Singular only has custodial documents for five: Dr. Bates and Messrs. Ozgen, Foley, Senanyake, and Henry. Moreover, as for the latter four individuals—all except Dr. Bates—Singular has “relatively limited custodial email.” You asserted that these results were “not surprising given that Dr. Bates is the sole named inventor.”

Because you seem to assert that Singular has a limited number of ESI custodians, we ask that you please provide a list of all Singular employees or contractors for which Singular possesses custodial ESI. Assuming Singular has eleven or fewer total custodians for which it possesses such documents, Google intends to add the remaining individuals to its proposed list of custodians. If Singular has more than eleven ESI custodians, Google will then identify the individuals for whom Singular should run ESI searches. If you are unable or unwilling to provide this list, please explain why.

Intrinsix ESI Custodians

Your letter also stated that you do not possess custodial documents for Mark Beal, Kent Arnold, or Steve Stecyk because they are “neither former nor present Singular Computing employees.”

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It is our understanding that Singular contends these three individuals are or were employed by Intrinsix while working on the Singular project team. But Singular contracted with Intrinsix to provide support services for, among other things, the design of the S1 chip. And Singular is required to produce documents over which it has “possession, custody, or control.” Fed. R. Civ. P. 34(a)(1). In determining possession, custody, or control, courts consider Singular’s “legal right or ability to obtain the information from another source upon demand.” *Tyler v. Suffolk Cty.*, 256 F.R.D. 34, 37 (D. Mass. 2009). Control may be established “by the existence of a principal-agent relationship . . . or a legal right pursuant to a contractual provision.” *Rosie D. v. Romney*, 256 F. Supp. 2d 115, 119 (D. Mass. 2003) (citations omitted).

Based on Singular’s document production to date, it appears that Singular has both the legal right and ability to obtain ESI documents for these three individuals upon demand. Singular outsourced its development work to Intrinsix and specifically these three individuals. As Singular’s documents show, Mark Beal and Dr. Bates were the “project leaders” and “architects” for the S1 chip. *See* SINGULAR-00010636 (Slide 109). Kent Arnold was the S1 “chip logic design leader.” *Id.* Steve Stecyk was the S1 “project manager” and “leader” of board and system development. *Id.* In fact, except for Dr. Bates, every member of the S1 design team is an Intrinsix employee. Further, Singular’s contract with Intrinsix gives Singular ownership of and the right to demand relevant information kept by Intrinsix. *See* SINGULAR-00004225-4276. Accordingly, we ask that Singular also collect and conduct an ESI search for Messrs. Beal, Stecyk, and Arnold. Should Singular refuse, please explain your basis for contending that the Intrinsix documents are outside of Singular’s control by **January 29, 2021**.

As a practical matter, we believe this approach is warranted because Prince Lobel also represents Intrinsix in this litigation and has access to the ESI; it can load the documents into the same database and run the search terms. Pursuant to the outstanding subpoena served on Intrinsix on August 17, 2020, Google therefore requests that the Intrinsix-specific search strings provided in Attachment B be run against the ESI collected from Messrs. Beal, Arnold, and Stecyk. Please confirm by **January 29, 2021** whether you will be conducting that search.

ESI Search Terms

Google is providing two sets of email search strings in Attachments A and B to this letter. Attachment A contains search strings for custodians employed directly by Singular. Attachment B contains search strings for the Intrinsix employees discussed above. Google requests that Singular and Intrinsix produce all non-privileged ESI documents created or received between January 1, 2008, and December 20, 2019, for each custodian and responsive to the search strings in Attachments A and B.¹ We hope that by providing these search strings now, Google and

¹ With regard to the search strings in Attachments A and B, an asterisk (*) shall function as a wildcard character so as to include all words made by adding letters to either the beginning or end of the term. Should Singular use a different character for a wildcard search, it shall specify what character is applicable. The search terms and strings are also not case-sensitive.

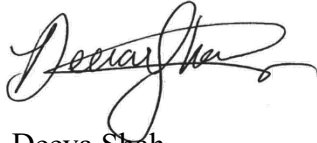
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Singular may be able to concurrently discuss any concerns about the proposed terms while finalizing the list of ESI custodians. Although our final list of custodians will be determined once Singular responds to this letter, we intend to name at least Dr. Bates as a custodian.

If you would like to discuss any of these issues, please let us know.

Sincerely,

A handwritten signature in black ink, appearing to read "Deeva Shah", with a stylized flourish at the end.

Deeva Shah

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<u>Attachment A – Singular Search Strings</u>	
Singular String 1	S1 OR S-1
Singular String 2	APE OR (approx* W/3 (process* OR comput*)) OR (approx* W/10 (precis* OR imprecis*)) OR “processing element*” OR PE
Singular String 3	Analog* OR *Deterministic OR systolic*
Singular String 4	Google* OR TPU* or Tensor*
Singular String 5	bfloat* OR BF* OR (Half W/3 float*) OR ((FP OR Float*) W/5 library) OR exponent* OR mantissa*
Singular String 6	FPGA* or ASIC* or GPU* or DSP*
Singular String 7	((table* OR conver*) W/10 (log* OR LNS OR *bit OR bit*)) OR “input signal*” OR ((round! OR trunc!) W/10 input*)
Singular String 8	Sandia OR DARPA OR BAE OR baesystems OR ONR OR Navy OR Intrinsix OR MOSIS OR USC OR GlobalFoundries OR CRA or “Charles River” OR Apple* OR Fujitsu* OR Takeshi OR Horie OR Bedichek OR Cadence* OR CAVE OR Roy OR CSAIL OR MIT* OR Media Lab OR NVidia OR Carnegie Mellon OR CMU* OR Kanade OR Hammerstrom OR Blueshift* OR Plotkin OR Struever OR Colwell OR emulator* OR (dep* /2 defense) OR DOD* OR (dep* /2 energy) OR DOE* OR "nuclear security" OR NSA OR NVESD OR army OR “night vision” OR NIWCP OR Naval OR “warfare pacific” OR SPRITE OR spectral OR SIGINT OR WAAS OR “airborne sensor” OR “energy efficient signal classifier” OR MAD-HATTER

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Singular String 9	Viredaz OR Ienne OR Tong OR Rutenbar OR Nagle OR Cray OR *T3D OR CF90TM OR CNAPS OR Baker OR SYNAPSE OR Ramacher OR Raab OR Wawrzynek OR Asanovic OR SPERT* OR Dockser OR (Annapolis Micro*) OR AMS OR Wildstar OR Wildforce OR Xilinx OR Splash OR Arnold OR Vertex* OR Virtex* OR DS112 OR LogiCore OR Qinetiq OR (float* /5 (core OR operat*)) OR Shirazi OR Walters OR Athanas OR Aty OR Azizi OR Hussein OR Ashour OR Mones OR Belanovic OR Leeser OR Sudha OR Prasanna OR Kamakoti OR (Texas Instrument*) OR *C32* OR GRAPE* OR Okumura OR Makino OR Ebisuzaki OR Fukushima OR Ito OR Sugimoto OR Hashimoto OR Tomida OR Miyakawa OR Hoefflinger OR Selzer OR Warkowski OR Yongsoon OR Barszcz OR Frantz OR Simar OR Gaffar OR VLSI OR Lopez OR Kuhn OR 286 OR i486 OR i860 OR Kinser OR Lindblad OR Kjosavik OR Kung OR Leiserson OR Leinhart OR McCartor OR OpenEXR OR OpenGL OR Paschke OR Moller OR Perlmutter OR Ramacher OR Rojas OR Zuse OR Z1 OR Z3 OR Rose OR Willoughby OR Sahin OR Kung OR 4,493,048 OR Cohen OR 5,442,577 OR Hawkins OR 5,666,071 OR MacMillan OR 5,689,677 OR Cloutier OR 5,892,962 OR Nelson OR 6,311,282 OR Levardo OR 6,600,222 OR Youngs OR *4760 OR Flynn OR *6164 OR Vollmer OR Strey OR VanDrunen OR Zhang OR Pal OR Patterson OR Hennessy OR “IEEE 754”
Singular String 10	Licens* OR collaborat* OR patent* OR (evaluat* /5 tech*) OR agreement*
Singular String 11	Dean OR Astro OR Teller OR Ng OR Quoc OR Obi OR Felton OR Tornabene OR Patterson OR Murphy OR Jouppi OR Boden OR Nan* OR Thrun OR Pioni OR (andrew /3 Ng) OR Spalink OR Mikanik OR Baluja
Singular String 12	Kent OR Arnold OR kjarnold OR Beal OR Stecyk OR Tenenbaum OR Boyd OR Struever OR dfaust OR Faust OR Shumikhin OR Varadarajan OR Liu OR Swetha OR Leo

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<u>Attachment B – Intrinsic Search Strings</u>	
Intrinsic String 1	S1 OR S-1
Intrinsic String 2	Bates OR Singular*
Intrinsic String 3	APE OR (approx* W/3 (process* OR comput*)) OR (approx* W/10 (precis* OR imprecis*)) OR “processing element*”
Intrinsic String 4	Analog* OR *Deterministic OR systolic*
Intrinsic String 5	Google* OR TPU* or Tensor*
Intrinsic String 6	bfloat* OR BF* OR (Half W/3 float*) OR ((FP OR Float*) W/5 library) OR exponent* OR mantissa*
Intrinsic String 7	((table* OR conver*) W/10 (log* OR LNS OR *bit OR bit*)) OR “input signal*” OR ((round! OR trunc!) W/10 input*)
Intrinsic String 8	Sandia OR DARPA OR BAE OR baesystems OR ONR OR Navy OR Intrinsic OR MOSIS OR USC OR GlobalFoundries OR CRA or “Charles River” OR Apple* OR Fujitsu* OR Takeshi OR Horie OR Bedichek OR Cadence* OR CAVE OR Roy OR CSAIL OR MIT* OR Media Lab OR NVidia OR Carnegie Mellon OR CMU* OR Kanade OR Hammerstrom OR Blueshift* OR Plotkin OR Struever OR Colwell OR emulator* OR (dep* /2 defense) OR DOD* OR (dep* /2 energy) OR DOE* OR "nuclear security" OR NSA OR NVESD OR army OR “night vision” OR NIWCP OR Naval OR “warfare pacific” OR SPRITE OR spectral OR SIGINT OR WAAS OR “airborne sensor” OR “energy efficient signal classifier” OR MAD-HATTER
Intrinsic String 9	Mustafa OR Ozgen OR Tenenbaum OR Boyd OR Struever OR Foley OR Senanayake OR Rawn OR dfaust OR Faust OR Shumikhin OR Varadarajan OR Liu OR Swetha OR Leo